



# ***Percutaneous transhepatic cholangiogram (PTC) and drainage*** (1 of 3)

## **What is a Percutaneous transhepatic cholangiogram (PTC) and drainage? What does it involve?**

A percutaneous biliary drainage is a procedure in which a small plastic tube (drain) is inserted into the liver through the skin to drain the bile. It is sometimes combined with taking a picture of the bile ducts to see where the blockage might be. This is known as a percutaneous transhepatic cholangiogram (PTC).

Biliary drainages are typically performed because you have become jaundiced (yellow) and extremely itchy. This is because the bile cannot flow normally into the gut and the condition makes you susceptible to infection. The most common reasons for this are gallstones and pancreatic masses, although there are other causes.

Before the PTC and drainage, the interventional radiologist will explain the procedure and ask you to sign a consent form. Please feel free to ask any questions that you may have, and remember that even at this stage, you can decide against going ahead with the procedure if you so wish.

You will be asked to get undressed and put on a hospital gown. A small cannula (thin tube) will be placed into a vein in your arm. You may receive a sedative to relieve anxiety, as well as an antibiotic. You will lie on the X-ray table, generally flat on your back. You may have monitoring devices attached to your chest and finger and may be given oxygen.

The procedure is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure. The procedure is performed using local anaesthetic and often sedation. The skin at the side of your abdomen will be swabbed and covered with sterile towels. Local anaesthetic will be injected into the skin to numb the area. Once the skin is numb, a small needle is inserted into the bile ducts. A small amount of dye (contrast agent) is injected to allow images to be taken of the ducts. Once the interventional radiologist has enough information, a drain will be left in place and connected to an external drainage bag.

If you need this information in another language or medium (audio, large print, etc) please contact Customer Care on 0800 374 208 email: [customer care@salisbury.nhs.uk](mailto:customer care@salisbury.nhs.uk).

You are entitled to a copy of any letter we write about you. Please ask if you want one when you come to the hospital.

If you are unhappy with the advice you have been given by your GP, consultant, or another healthcare professional, you may ask for a second (or further) opinion.

The evidence used in the preparation of this leaflet is available on request. Please email: [patient.information@salisbury.nhs.uk](mailto:patient.information@salisbury.nhs.uk) if you would like a reference list.

Author: Charlotte Gibbons  
Role: Radiographer  
Date written: July 2013  
Last reviewed: June 2016  
Review date: June 2019  
Version: 1.2  
Code: P1122

**Clinical Radiology**  
**01722 336262 ext 2857**

## Are there any side effects or risks?

A PTC and drainage are a safe procedure, but as with any medical procedure there are some risks and complications that can arise.

- if the bile is infected, although you may be on antibiotics, there is a small risk that infection might be released into your bloodstream, making you unwell for a period.
- there is a risk of bleeding, though this is generally very slight. If the bleeding were to continue, then it is possible that you might need a blood transfusion. Very rarely, an operation or another radiological procedure is required to stop the bleeding.
- there is an extremely small risk of allergic reaction to the X-ray dye.

## Radiation dose

This investigation involves exposure to X-rays. X-rays consist of a type of radiation known as ionising radiation. The doses that are used in medical X-rays are very low and the associated risks are minimal. The radiation dose is about the same as the average person receives from background radiation over 5-6 weeks. Special precautions are taken to keep the radiation dose to a minimum.

## What if I am pregnant?

This examination should not be for women who are pregnant, unless there are exceptional circumstances. Please advise the department if you are, or think you are pregnant.

## Is there any special preparation?

Generally you are brought onto a hospital ward the day before the procedure, so that all preparations are completed, including blood tests. Though this isn't always the case and you may just stay in hospital after the procedure. Bring an overnight bag, as you will be staying overnight in hospital to recover.

At least a day before, you will be asked to have a blood test to make sure your blood clots normally. Be sure to mention any medicines you take, especially those that affect blood clotting, like aspirin, anticoagulants such as warfarin and especially the cardiac drug Clopidogrel.

You must not eat anything for six hours before the procedure and you must only have clear fluids up to two hours before. Your doctor will tell you whether to take your regular medications during the fasting period and may give you other special instructions.

If you have any allergies or have previously had a reaction to the dye (contrast agent), you must tell the radiology staff before you have the test.

## How long does it take? What happens after?

Every patient's situation is different, and it is not always easy to predict; however, expect to be in the X-ray department for about an hour altogether. After the procedure you will be taken back to the ward to recover (you can expect to stay in hospital for at least 12 hours). Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no problems.

## Will it hurt?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. When the needle and catheter are placed in the liver, you may feel a dull ache in the right shoulder and some discomfort in the central abdomen. You will be given painkillers before and during the procedure and an injection to make you sleepy and relaxed.

## Finally...

Hopefully some of your questions will have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are completely satisfied that you have received enough information about the procedure before you sign the consent form.